

**U.S. Department of Energy**  
**WEATHERIZATION ANNUAL FILE WORKSHEET**

Grant: R530354

Amendment: 013

State: MO

Program year: 2003

Budget period: 7/1/2003 - 6/30/2004

**II.3 Subgrantees**

Grantee	City	Tentative	
		Funding	Units
Community Services, Incorporated of Northwest Mo.	Maryville	192,101.00	59
Delta Area Economic Opportunity Corporation	Portageville	255,500.00	79
East Missouri Action Agency	Park Hills	247,699.00	76
Economic Security Corporation of Southwest Mo.	Joplin	241,772.00	75
Green Hills Community Action Agency	Trenton	134,818.00	41
Central Mo. Counties Human Development Corp.	Columbia	284,963.00	88
Urban League of Metropolitan St. Louis	St. Louis	523,086.00	173
Jefferson-Franklin Community Action Corporation	Hillsboro	200,617.00	62
Dept. of Housing & Community Development	Kansas City	635,539.00	211
Services Toward Empowering People	St. Louis	502,155.00	166
Missouri Ozarks Community Action, Inc.	Richland	251,314.00	78
Missouri Valley Human Resource Comm Action Agency	Marshall	202,615.00	62
North East Community Action Corporation	Bowling Green	290,606.00	90
Northeast Missouri Community Action Agency	Kirksville	103,781.00	31
Ozark Action, Inc.	West Plains	204,970.00	63
Ozarks Area Community Action Corporation	Springfield	505,528.00	167
South Central Missouri Community Action Agency	Winona	189,186.00	58
West Central Missouri Community Action Agency	Appleton City	224,996.00	69
<b>TOTALS</b>		<b>\$ 5,191,246.00</b>	<b>1,648</b>



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Units by type (excluding reweatherized):

Owner-occupied single-family site-built

Single-family rental site-built

Multi-family

Owner-occupied mobile home

Renter-occupied mobile home

Shelter

Units by occupancy:

Elderly

Persons with disabilities

Native American

Children

High residential energy user

Household with a high energy burden

Other unit types:

**Rewatherized 32**

LC/NC

Energy crisis

Total persons assisted

Elderly

Persons with disabilities

Native American

Children



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## Average Unit Costs, including Reweathering, Subject to DOE Program Rules

GROSS AVERAGE COST PER UNIT		
A	Total Funds, Federal & Non-Federal from Supplemental Schedule #1	\$ 5,907,364
B	Total Units to be Weatherized from Production Schedule	1,616
C	Total Units to be Reweatherized from Production Schedule	32
D	Grand Total Units	1,648
E	Gross Average Cost per Unit (A divided by D)	\$ 3,585
VEHICLES & EQUIPMENT COST PER UNIT		
F	Total Vehicle & Equipment Budget	
G	Total Units to be Weatherized and Reweatherized	1,648
H	Average Vehicle & Equipment Acquisition Cost per Unit (F divided by G)	
AVERAGE COST PER UNIT (DOE RULES)		
I	Total Funds for Program Operations Budget Section B	\$ 3,809,245
J	Total Units to be Weatherized	1,616
K	Total Units to be Reweatherized	32
L	Grand Total Units	1,648
M	Average Cost per Unit (I divided by L)	\$ 2,311
N	Average Vehicle & Equipment Acquisition Cost (line H)	
O	Total Average Cost per Unit (M plus N)	\$ 2,311

## II.5 Energy Savings

Method used to calculate energy savings: ☐ WAP algorithm ☒ Other (describe below)

The State estimates it will save approximately .4408 TBTU for the Program Year. The energy savings methodology assumes an average Missouri home consumes 198.11 mmbtu and saves approximately 13.5% as a result of WAP (from September 1994 Weatherization Works: Final Report of the National Weatherization Evaluation).  $ES = 198.11 \text{ mmbtu} \times 0.135 \text{ savings} \times 1,648 \text{ units}$ .

Estimated average annual savings per dwelling based on the 1996 DOE Metaevaluation study

Primary heating fuel	Space Heating Savings	Total fuel Savings	Net savings(Mbtu/year)
Natural Gas	33.5%	23.4%	31.2 Mbtu/year
Electricity	35.9%	12.2%	18.9 Mbtu/year
Fuel Oil (Northeast)	17.7%	17.7%	22.4 Mbtu/year
All fuels*	18.2%	13.5%	17.6 Mbtu/year

\*Includes estimates for propane, wood, kerosene, and other fuels.



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Estimated energy savings: 440,755 (MMBTUs)  
 Estimated prior year savings: Actual: 541,320

**If variance is large, explain:**

Actual number of homes is 2024 for PY2001.

**II.6 Monitoring Activities**

DNR/EC monitoring activities span four distinct but interrelated areas of program operations:

1. Housing quality inspections
2. Production and expenditure reviews
3. Fiscal and program operations
4. Oversight of federal/state requirements and regulations

Implementing the DNR/EC monitoring system involves:

**A. Desk Monitoring**

A Subgrantee is required to submit monthly reports to DNR/EC that include the client's names, job numbers and other required information. From these documents, DNR/EC can determine compliance with:

- The federally designated expenditure categories.
- Mandatory expenditure levels.
- Actual expenditures versus planned expenditures.
- Overall expenditure rates by each Subgrantee.
- Characteristics of completed homes.
- Numbers of completed units per month.
- Numbers of persons and households by WAP targets.

Reimbursement to a Subgrantee is based on clear, accurate reporting of expenditures and clients served. DNR/EC provides each Subgrantee with an analysis of the monthly report. This includes feedback concerning specific problems a Subgrantee may be experiencing in its operations or in its compliance with grant requirements. Information collected is also used to target selected items for monitoring during field visits to a Subgrantee.

**B. Procedural Monitoring**

DNR/EC will visit each Subgrantee at least once each program year to review procedural, fiscal and compliance issues. DNR/EC will conduct a thorough review of the procedures of the Subgrantee by using a standardized check list.

DNR/EC will review Subgrantee compliance with federal/state regulations and requirements as specified in the Missouri WAP State Plan, the Missouri WAP Competitive Procurement Standards, and the DNR Terms and Conditions of Grant Agreement.

Annual independent audits will be reviewed by the DNR Outreach and Assistance Center's Fiscal and Administrative Services Office.



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**C. Housing Quality Monitoring**

Several factors are inspected by DNR/EC housing quality monitors during on-site visits.

1. DNR/EC will schedule an on-site visit(s) to a Subgrantee as necessary to inspect the quality of work on the homes completed. A representative sample of completed homes will be inspected to determine whether or not the work reported and materials installed are in compliance with WAP standards.

DNR/EC will have the option to inspect additional houses when implementing new measures or other concerns arise. Inspection checklists are used to assist DNR/EC with on-site inspections. Additional information may be obtained or requested from the Subgrantee client files to document the findings of the monitoring visit. DNR/EC will inspect the following:

- Compliance with allowable WAP measures.
- Quality of work.
- Accuracy of the report concerning the amount of material installed on the home.
- Assurance that the initial energy audit and final inspection are appropriate, accurate and complete.

2. DNR/EC may also perform follow-up reviews of homes where additional work or corrective measures were required as a result of a past DNR/EC inspection.

3. Selected materials will be inspected to insure they meet federal specifications.

4. Pre-audits may be done to determine accuracy.

**D. Independent Monitoring****1. Independent Fiscal Audit Review**

A Subgrantee is required to have an annual fiscal audit, in accordance with OMB Circular A-133. This audit shall document expenditures and compliance with regulations and requirements. The independent auditor shall use the schedules found in the WAP audit guide to present the required financial data. Findings are compared to the subgrant and monthly reports.

**2. USDOE Support Office Review**

DNR/EC participates in monitoring performed by the USDOE Support Office which provides an opportunity for independent review of the Subgrantee. These monitoring activities are tracked by the Federal Assistance Management Summary Report (FAMSR).

**II.7 T&TA Activities**

Local agency training:

Professional Alliance and Energy Center assessment of agency training needs concluded the following points:

- Training should be on-going
- Training should be mandatory depending on job classification, voluntary in other instances
- Training should include theory and hands-on approach



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The top rated training approaches are:

- Regional training
- A combination of training options
- Internet courses
- Conferences and workshops
- Peer exchange

The Missouri Department of Natural Resources' Energy Center is committed to provide a quality weatherization assistance program to reduce energy costs for low-income households by increasing energy efficiency and ensuring health and safety. Training of local agency weatherization staff is an essential part of this commitment.

Training activities will focus efforts on a certification program for Missouri weatherization technicians. The objective is to provide a mechanism by which the technicians working in the Missouri weatherization program may be certified in accordance with the standards set forth by the Building Performance Institute (BPI). BPI is a not-for-profit organization promoting quality building practices by providing trade-based certification of building trade worker skills. BPI is a resource for independent third party verification of worker skills in the weatherization industry and building trades. BPI has established technical standards and testing protocols for trade professionals to ensure both the efficiency and durability of the buildings they work on and the comfort and safety of the people who live in them. BPI-certified technicians are required to demonstrate competency in the knowledge and performance skills necessary to inspect, diagnose and troubleshoot building performance issues.

Training activities will be coordinated through a grant agreement with the Missouri Association for Community Action (MACA). MACA is a state association for the state network of local agencies that provide low-income programs including weatherization assistance. MACA has a full time Training and Grants Manager.

Utilizing the BPI staff and technical committee, the existing Missouri program policies and procedures will be reviewed. Using BPI's established technical standards as a baseline, this review will identify areas where the state standards require revision. Suggested revisions will be drafted in cooperation with Missouri's Technical Work Group.

In order for BPI to make informed recommendations for certification-preparatory training courses, an initial on-site skill assessment will be conducted. This will include job observation of a representative sample of technicians by BPI staff. BPI does not participate directly in training activities. BPI will provide summary reports of certification activities and results to the state program on an annual basis.

Training courses will focus on Auditor and Shell Specialist certifications. Missouri training topics will also be addressed. It is anticipated that training will include the following courses:

Building Science Principles  
Basic Auditing procedures  
Advanced Building Diagnostics  
Air Sealing and Insulation Materials and Techniques  
Combustion Heating Systems  
Combustion Appliances  
Duct System Diagnostics and Repair  
Health and Safety  
Using NEAT to Establish Weatherization Priorities



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New employees and existing staff that need refresher courses will require ongoing training that include Lead-Safe Work Practices, NEAT Audit and Blower Door.

Certification is an ongoing activity that will not be completed in the first year. Re-certification will need to be completed every third year.

Training and Technical Assistance resources and budget information:

Details regarding state program oversight and T&TA funding are contained in the standard federal 424 form: Federal Assistance Budget information section A and B. The Missouri Energy Center has allocated a portion of state T&TA funds to each subgrantee. Upon DNR/EC approval of LIWAP Subgrantees T&TA plan, Subgrantees will be awarded new T&TA funds of \$4,000. T&TA funds awarded directly to the Subgrantee may be utilized to pay costs associated with:

- Local and state LIWAP and LIWAP-related meetings/conferences/trainings
- Regional and national LIWAP or LIWAP-related meetings/conferences/trainings
- Training on computers and software related to LIWAP operations
- LIWAP training or assistance provided between Subgrantees

Effectiveness of Training and Technical Assistance activities:

A formal evaluation will be conducted for training courses to rate content, effectiveness of instruction and applicability to continued improvement in weatherization services, increased energy-efficient housing, and impact on cost and quality of home energy retrofit.

**II.8 Leveraging****II.8.1.1 Other Funding Sources**

Federal programs such as: Community Services Block Grant (CSBG), Emergency Crisis Intervention Program (ECIP), Housing Preservation Grant (HPG), Community Development Agency (CDA), Community Development Block Grant (CDBG), Housing Development Commission (HDC).

Other funds leveraged such as: Missouri Housing Trust Fund (state funds), utilities, for profit corporations, private and corporate contributions, landlord contributions, and Utilicare funds (state funds).

PY98 Leveraged/Partnership Funds	Funding	# Homes
Federal Programs	\$1,269,012.51	615
Corporate Contributions	\$721,685.11	323
For Profit	\$809.28	71
Utility Company	\$758,229.05	471
Landlord Contributions	\$29,730.49	53
Utilicare	\$844,000.00	678
TOTALS	\$3,623,466.44	2,211

**II.8.1.2 Subgrantees Involved in The Leveraging Process**



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Missouri Ozarks Community Action, Inc.  
Missouri Valley Human Resource Comm Action Agency  
North East Community Action Corporation  
Northeast Missouri Community Action Agency  
Ozark Action, Inc.  
Ozarks Area Community Action Corporation  
South Central Missouri Community Action Agency  
West Central Missouri Community Action Agency

**II.8.2 Use of DOE Leveraging funds and of The Funds Leveraged**

Federal regulations allow weatherization funds to be used for leveraging activities. Under leveraging, subgrantees work at developing relationships with property owners, utility companies and other entities that generate non-federal resources for the program. Non-federal resources are used to supplement the program and expand energy efficiency services and/or increase the number of dwelling units completed for weatherization eligible clients.

Subgrantee agencies are encouraged to request up to 5% of their grant allocation for leveraging purposes. Subgrantee requests for leveraging must include specific planned leveraging activities; targeted partners (e.g., landlords, utilities, other agencies); and estimated outcomes including dollar amounts. A budget decrease from the maximum allowed under this category will require written justification and DNR/EC approval. If agencies do not initiate meaningful leveraging activities, the funds may be considered as state carryover, and may be redirected to other agencies.



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Urban League of Metropolitan St. Louis	Mr. Rolandis Nash, Weatherization Director
Dept. of Housing & Community Development	Mr. Robert Jackson, Weatherization Director
Ozark Action, Inc.	Mr. Terry Sanders, Weatherization Director
Green Hills Community Action Agency	Mr. Don Warren, Executive Director
Office of Public Counsel	Mr. Ryan Kind
Boone Electric Cooperative	Mr. Chris Rohlfing
Public Service Commission	Ms. Lena Mantle
Lieutenant Governor's Office	Maria Chappelle-Nadal

**Last year's PAC meeting(s)**

Meeting Date	Attendance
2/20/2003	8

**II.10 State Plan Hearings (send hearing transcript(s) to the Regional Support Office)**

Hearing Date
3/11/2003
3/25/2003

Newspapers that publicized the hearings and the dates that the notice ran.

Kansas City Star  
St. Louis Post Dispatch

**II.11 Miscellaneous**

DNR/EC began using the NEAT audit on a statewide basis on July 1, 1994.

Technical Work Group: The state, working with the Professional Alliance, formed a Technical Work Group. This group will advise the state on technical matters such as electric base load measures. The Technical Work Group is represented by:

Dale Noland, Economic Security Corporation, Joplin  
Terry Sanders, Ozark Action, Inc., West Plains  
Mike Baker, Northeast Missouri Community Action Agency, Kirksville  
John Quimby, KC Department of Housing & Community Development, Kansas City  
Patti Magruder, Missouri Association for Community Action, Jefferson City  
David Miller, Missouri Ozarks Community Action, Richland  
Steve Cobb, Delta Area Economic Opportunity Corporation, Portageville

The Technical Work Group will make recommendations regarding implementation of electric baseload measures for the Missouri Weatherization Program.

**Additional Information for this Program Year**

- Weatherization Assistance funding not spent by the end of a budget period may be recaptured.
- No more than 15 percent of subgrantee agency awards may be carried forward into the next budget period.
- Subgrantee carryover in excess of 15 percent may be recaptured and redistributed to other subgrantee agencies as determined by the DNR/EC.
- If because of leveraging of other funds or other circumstances, a subgrantee agency determines the need to



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carryover monies in excess of 15 percent, a request along with documentation and justification must be submitted to the DNR/EC for approval.

- The DNR/EC plans to utilize the \$2,614 average cost per home, including any inflationary adjustments.